

Abstract of the Disclosure

A method for time scaling and/or pitch shifting an audio signal analyzes an audio signal using multiple psychoacoustic criteria to identify a region of the audio signal in which the omission of a portion of the audio signal or the repetition of a portion of the audio signal is inaudible or minimally audible, it selects a splice point in the region of the audio signal, it deletes a portion of the audio signal beginning at the splice point or it repeats a portion of the audio signal ending at the splice point, and it reads out the resulting audio signal at a rate that yields a desired audio signal time duration and a desired time scaling and/or pitch shifting. In another aspect, a method for time scaling and/or pitch shifting multiple channels of audio signals analyzes each of the audio signals using at least one psychoacoustic criterion to identify at least one region in each of the audio signals in which the omission of a portion of the audio signal or the repetition of a portion of the audio signal is inaudible or minimally audible, it selects a common splice point in one of the regions in each of the audio signals, wherein the splice points in the multiple channels of audio signals are selected to be substantially aligned with one another, it deletes a portion of each audio signal beginning at the common splice point or it repeats a portion of the audio signal ending at the common splice point, and it reads out the joined leading and trailing segments at a rate that yields a desired audio signal time duration and a desired time scaling and/or pitch shifting.